Item 59
(4439)

STATE OF CALIFORNIA — Public Utilities Commission
San Francisco

M e m o r a n d u m

Date: April 1, 2005

To: The Commission
(Meeting of April 7, 2005)

From: Delaney Hunter, Director
Office of Governmental Affairs (OGA) — Sacramento

Subject: **AB 1547 (Levine) Energy: renewable energy: solar generation of electricity**
As Introduced February 22, 2005

LEGISLATIVE SUBCOMMITTEE RECOMMENDATION: Support if Amended

SUMMARY: The bill requires the Commission to establish the Solar Energy Peak Procurement Program to be funded by any unallocated funds previously authorized for demand management and interruptible programs and requires CEC to create a solar energy rebate program by no later than July 1, 2005 to support the installation of grid connected solar energy systems.

DIGEST: Existing law (the Public Utilities Act) requires the Commission to require Pacific Gas and Electric Company, San Diego Gas and Electric, and Southern California Edison to identify a separate electrical rate component to fund programs that enhance system reliability and provide in-state benefits. This rate component is a nonbypassable element of local distribution and collected on the basis of usage. The funds are collected to support cost-effective energy efficiency and conservation activities, public interest research and development not adequately provided by competitive and regulated markets, and renewable energy resources.
Existing commission resolutions refer to the nonbypassable rate component as a "Public Goods Charge" (PGC). Existing law requires the Energy Commission to transfer funds collected by electrical corporations for in-state operation and development of existing and new and emerging renewable resources technologies into the Renewable Resource Trust Fund, to fund specified programs. Existing law requires that 17.5% of the money collected under the renewable energy PGC be used to fund the Emerging Renewable Resources Account within the Renewable Resource Trust Fund for the purpose of a multiyear, consumer-based program to foster the development of emerging renewable technologies in distributed generation applications.

Under the Reliable Electric Service Investments Act, the Energy Commission was required to hold moneys collected for renewable energy and deposited in the Renewable Resource Trust Fund until further action by the Legislature. The act requires the Energy Commission to create an initial investment plan, in accordance with specified objectives, to govern the allocation of funds in the Renewable Resource Trust Fund collected between January 1, 2002, and January 1, 2007, in order to ensure a fully competitive and self-sustaining California renewable energy supply.

Existing law requires the Energy Commission, on or before March 31, 2006, to prepare an investment plan proposing the application of moneys collected between January 1, 2007, and January 1, 2012, and prohibits expenditures from the accounts within the Renewable Resource Trust Fund without further legislative action.

This bill would enact the Solar Energy Peak Procurement Act. The bill would except moneys expended through the Emerging Renewable Resources Account from the requirement that the Energy Commission prepare an investment plan on or before March 31, 2006, and would authorize the Commission to advance moneys to the Emerging Renewable Resources Account and to expend those moneys without further legislative action, subject to certain existing repayment provisions, thereby making an appropriation. The bill would require the Energy Commission to ensure proportional program support through the Emerging Renewable Resources Account, for affordable housing units, within certain limits.

Existing law requires the Commission, in consultation with the CA ISO and the Energy Commission, to adopt initiatives, on or before March 7, 2001, to reduce demand for electricity and reduce load during peak demand periods, including differential incentives for renewable or super clean distributed generation resources. Existing law requires the Commission, in consultation with the Energy Commission, to administer, until January 1, 2008, a self-generation incentive program for distributed generation resources in the same form that exists on January 1, 2004.

Existing law requires the Energy Commission to expand and accelerate development of alternative sources of energy, including solar resources. Existing law requires the Energy Commission, until January 1, 2006, and to the extent that funds are appropriated for that purpose in the annual Budget Act, to implement a grant program to accomplish specified goals, including making solar energy systems cost competitive with alternate forms of energy.

This bill would create the Solar Energy Peak Procurement Fund for expenditure, upon appropriation, for a state program for subsidizing all customer classes for the installed cost of grid-connected solar photovoltaic systems in the service territory of investor-owned utilities. The bill would require the Energy Commission, not later than July 1, 2005, to award rebates to support the installation of grid-connected solar energy systems, subject to a prescribed declining schedule terminating as of January 1, 2015.

The bill would require the Energy Commission to ensure proportional program support for affordable housing units, within certain limits.

The bill would require the Commission to open a proceeding to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible demand reduction programs.

The bill would require the Commission to direct utilities to deposit a portion of electric rate revenues in the Solar Energy Peak Procurement Fund from unallocated funds previously authorized for demand management and interruptible programs and rates that previously paid for those programs and that the CPUC determines are less cost effective than the photovoltaic incentive system established by the bill. The bill would require the CPUC to make certain reports to the Legislature.

This bill would require that the amounts collected to fund energy efficiency, renewable energy, and research, development, and demonstration during 2005 and 2006, be set at the levels established by the CPUC for 2004, and would require that any moneys collected above those 2004 levels during 2005 and 2006, be transferred to the Solar Energy Peak Procurement Fund.

Existing law requires each local publicly owned electric utility to establish a nonbypassable usage based charge to fund investments in specified public purpose programs, including energy efficiency and conservation, investment in renewable energy resources, research, development and demonstration programs, and providing services for low-income electricity customers. The charge is required to be not less than the lowest expenditure of the 3 largest electrical corporations in California based on a percentage of revenue.

This bill would require every local publicly owned electric utility, as defined, to establish a solar program consistent with the Solar Energy Peak Procurement Program. Each local publicly owned electric utility would be required to report, on an annual basis, to its customers and to the Energy Commission, information relative to the utility's solar program and would authorize the Energy Commission to establish guidelines for the information to be included in the annual report.

This bill would require that beginning January 1, 2010, a seller of production homes, as defined, offer a solar energy system, as defined, option to all customers negotiating to purchase a new production home and to disclose certain information.

Existing law requires every electric service provider, upon request, to make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds 0.5% of the electric service provider's aggregate customer peak demand.

This bill would require that every electric service provider, upon request, make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds 1.5% of the electric service provider's aggregate customer peak demand.

Existing law authorizes the Commission to fix the rates and charges for every public utility, and requires that those rates and charges be just and reasonable.

This bill would require the CPUC, in collaboration with the Energy Commission, to develop optional time-variant electricity pricing tariffs for all customers that are not subject to mandatory time-variant pricing.

DIVISION ANALYSIS (Energy): The bill's mandates are consistent with policies being developed through a public process in a current CPUC proceeding (R.04-03-017).

In December 2004 and March 2005, two CPUC rulings, respectively 1) solicited public comment on how the CPUC could implement a large-scale solar incentive program, and 2) requested CPUC and CEC staff to incorporate these comments into a joint agency staff report proposing such a program. The joint staff report, which will be completed in spring 2005, is expected to address program funding needs and allocations, advanced metering and tariffs, appropriate incentive levels, capacity vs. performance-based incentives, and other related issues.

The CPUC is exploring methods to evaluate the costs and benefits of distributed generation, including solar generating systems. The CPUC is scheduled to receive a round of public comments beginning April 7, and will hold hearings the week of May 8 regarding cost-benefit issues.

The CPUC currently implements a solar incentive program, mandated by Assembly Bill 970 and Assembly Bill 1685. The funding mechanism, administrative structure, incentive disbursal, warranty requirements, monitoring and evaluation metering and hardware, program data web-posting and utility program reporting requirements are already in place. It would be relatively straightforward to incorporate the requirements of SB 1 into the existing CPUC solar program.

RECOMMENDED AMENDMENTS:

In discussions with the author's office, staff understands there are likely to be substantive amendments to this bill in the coming weeks. Issues such as funding sources, specific solar technologies to be targeted for incentives, net metering policies and overall cost effectiveness of solar programs measured

against other programs aimed at reducing peak demand are but a few of the issues that will be addressed in future amendments.

Staff recommends that we work with the author to craft a bill that meets the Commissions goals and objectives relative to solar.

Below are brief amendments to remove current funds for interruptible programs as a potential funding source.

Amend Section 8 of the bill as follows:

Strike (3), (4) and (6) of Section 2830

~~(3) Electricity generated by photovoltaic systems is a substitute for demand management activities which lower peak demand.~~

~~(4) Electricity generated by photovoltaic systems is a substitute for interruptible energy programs which lower peak demand.~~

~~(6) The commission has established demand management programs and interruptible energy programs and allocates the costs of those programs to all customers.~~

Amend Section 2831

The commission shall by January 1, 2006, open a proceeding to examine the relative costs and benefits ~~between~~ ***of*** solar rebate programs ~~and commission-administered interruptible and demand reduction programs~~, as follows:(a) The proceeding shall review the self-generation incentive program administered by the commission to harmonize it with the solar energy programs administered by the State Energy Resources Conservation and Development Commission and shall issue a report on its recommendations to the Legislature.

~~(b) The proceeding shall include the conducting of a cost versus benefit analysis to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible and demand reduction programs that are in the best interests of ratepayers.~~

~~(c)~~ ***(b)***The proceeding shall review the cost and benefits of net metering and report to the Legislature on whether the net metering cap should be changed.

Amend Section 2834.

The commission shall direct utilities to regularly deposit a portion of the moneys derived from electric rates into the Solar Peak Energy Procurement Fund. The commission

shall determine the amount of electric rates to be deposited. ~~That amount shall come from unused funds previously authorized for demand management and interruptible programs and rates which previously paid for demand management and interruptible programs which the commission determines to be less cost effective than the photovoltaic incentive program established by Division 16.7 (commencing with Section 26420) of the Public Resources Code.~~

LEGISLATIVE HISTORY:

This bill is substantially the same language as contained in Senate Bill 118 (Bowen), which died last year in the State Assembly.

- AB 970 directed the CPUC to implement a differential incentive program for renewables and ultra-clean distributed generation, funded by utility distribution rates.

Last Session several bills were contemplated by the Legislature relative to solar. They are as follows:

- SB 199 (Murray) would have established the Solar Homes Peak Energy Procurement Program – a rebate program for installation of new solar energy systems with the goal of installing solar system of a million homes by 2017 funded by any increases in the PGC. Died in Assembly Utilities & Commerce Committee.

- SB 118 (Bowen) would have established a solar photovoltaic program funded by rates currently supporting demand response and interruptible programs. Died on Assembly Floor (see note above).

- AB 135 (Reyes) Extended by one year, until December 31, 2008, the Energy Commission's (CEC) authority to spend moneys collected in the Renewable Resources Trust Fund (RRTF) for emerging renewable technologies from other accounts within RRTF, but limits this authority to no more than $60 million. Signed by Governor Schwarzenegger.

STATUS:

Set for hearing in Assembly Utilities & Commerce Committee on April 18, 2005.

SUPPORT/OPPOSITION

Support: unknown

Opposition: unknown

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Date: April 1, 2005

BILL LANGUAGE:

BILL NUMBER: AB 1547 INTRODUCED
BILL TEXT

INTRODUCED BY Assembly Member Levine

FEBRUARY 22, 2005

An act to amend Section 25744 of, to add Section 25402.10 to, and to add Division 16.7 (commencing with Section 26421) to, the Public Resources Code, and to amend Sections 399.6, 399.8, 2827, 3345, and 3370 of, to add Sections 385.1 and 760 to, and to add Chapter 8 (commencing with Section 2830) to Part 2 of Division 1 of, the Public Utilities Code, relating to solar energy, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

AB 1547, as introduced, Levine. Energy: renewable energy: solar generation of electricity.

(1) The existing Public Utilities Act requires the Public Utilities Commission (CPUC) to require Pacific Gas and Electric Company, San Diego Gas and Electric, and Southern California Edison to identify a separate electrical rate component to fund programs that enhance system reliability and provide in-state benefits. This rate component is a nonbypassable element of local distribution and collected on the basis of usage. The funds are collected to support cost-effective energy efficiency and conservation activities, public interest research and development not adequately provided by competitive and regulated markets, and renewable energy resources. Existing commission resolutions refer to the nonbypassable rate component as a "Public Goods Charge" (PGC). Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission) to transfer funds collected by electrical corporations for in-state operation and development of existing and new and emerging renewable resources technologies into the Renewable Resource Trust Fund, to fund specified programs. Existing law requires that 17.5% of the money collected under the renewable energy PGC be used to fund the Emerging Renewable Resources Account within the Renewable Resource Trust Fund for the purpose of a multiyear, consumer-based program to foster the development of emerging renewable technologies in distributed generation applications.

Under the Reliable Electric Service Investments Act, the Energy Commission was required to hold moneys collected for renewable energy and deposited in the Renewable Resource Trust Fund until further action by the Legislature. The act requires the Energy Commission to create an initial investment plan, in accordance with specified objectives, to govern the allocation of funds in the Renewable Resource Trust Fund collected between January 1, 2002, and January 1, 2007, in order to ensure a fully competitive and self-sustaining California renewable energy supply. Existing law requires the Energy Commission, on or before March 31, 2006, to prepare an investment plan proposing the application of moneys collected between January 1, 2007, and January 1, 2012, and prohibits expenditures from the accounts within the Renewable Resource Trust Fund without further

legislative action.

This bill would enact the Solar Energy Peak Procurement Act. The bill would except moneys expended through the Emerging Renewable Resources Account from the requirement that the Energy Commission prepare an investment plan on or before March 31, 2006, and would authorize the commission to advance moneys to the Emerging Renewable Resources Account and to expend those moneys without further legislative action, subject to certain existing repayment provisions, thereby making an appropriation. The bill would require the Energy Commission to ensure proportional program support through the Emerging Renewable Resources Account, for affordable housing units, within certain limits.

(2) Existing law requires the Public Utilities Commission, in consultation with the Independent System Operator and the Energy Commission, to adopt initiatives, on or before March 7, 2001, to reduce demand for electricity and reduce load during peak demand periods, including differential incentives for renewable or super clean distributed generation resources. Existing law requires the commission, in consultation with the Energy Commission, to administer, until January 1, 2008, a self-generation incentive program for distributed generation resources in the same form that exists on January 1, 2004.

Existing law requires the Energy Commission to expand and accelerate development of alternative sources of energy, including solar resources. Existing law requires the Energy Commission, until January 1, 2006, and to the extent that funds are appropriated for that purpose in the annual Budget Act, to implement a grant program to accomplish specified goals, including making solar energy systems cost competitive with alternate forms of energy.

This bill would create the Solar Energy Peak Procurement Fund for expenditure, upon appropriation, for a state program for subsidizing all customer classes for the installed cost of grid-connected solar photovoltaic systems in the service territory of investor-owned utilities. The bill would require the Energy Commission, not later than July 1, 2005, to award rebates to support the installation of grid-connected solar energy systems, subject to a prescribed declining schedule terminating as of January 1, 2015. The bill would require the Energy Commission to ensure proportional program support for affordable housing units, within certain limits.

The bill would require the CPUC to open a proceeding to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible demand reduction programs.

The bill would require the CPUC to direct utilities to deposit a portion of electric rate revenues in the Solar Energy Peak Procurement Fund from unallocated funds previously authorized for demand management and interruptible programs and rates that previously paid for those programs and that the CPUC determines are less cost effective than the photovoltaic incentive system established by the bill. The bill would require the CPUC to make certain reports to the Legislature.

(3) Existing law requires that the PGC be adjusted annually at a rate equal to the lesser of the annual growth in electric commodity sales or inflation, as defined.

This bill would require that the amounts collected to fund energy efficiency, renewable energy, and research, development, and demonstration during 2005 and 2006, be set at the levels established by the CPUC for 2004, and would require that any moneys collected above those 2004 levels during 2005 and 2006, be transferred to the Solar Energy Peak Procurement Fund.

(4) Existing law requires each local publicly owned electric utility to establish a nonbypassable usage based charge to fund investments in specified public purpose programs, including energy efficiency and conservation, investment in renewable energy resources, research, development and demonstration programs, and providing services for low-income electricity customers. The charge is required to be not less than the lowest expenditure of the 3 largest electrical corporations in California based on a percentage of revenue.

This bill would require every local publicly owned electric utility, as defined, to establish a solar program consistent with the Solar Energy Peak Procurement Program. Each local publicly owned electric utility would be required to report, on an annual basis, to its customers and to the Energy Commission, information relative to the utility's solar program and would authorize the Energy Commission to establish guidelines for the information to be included in the annual report. By imposing additional requirements on local publicly owned electric utilities, the bill would impose a state-mandated local program.

(5) Existing law requires a solar energy system to meet applicable standards and requirements imposed by state and local permitting authorities.

This bill would require that beginning January 1, 2010, a seller of production homes, as defined, offer a solar energy system, as defined, option to all customers negotiating to purchase a new production home and to disclose certain information.

(6) Existing law requires every electric service provider, as defined, to develop a standard contract or tariff providing for net energy metering, and to make this contract available to eligible customer generators, upon request. Existing law requires every electric service provider, upon request, to make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds 0.5% of the electric service provider's aggregate customer peak demand.

This bill would require that every electric service provider, upon request, make available to eligible customer generators contracts for net energy metering on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer generators exceeds 1.5% of the electric service provider's aggregate customer peak demand.

(7) Existing law authorizes the CPUC to fix the rates and charges for every public utility, and requires that those rates and charges be just and reasonable.

This bill would require the CPUC, in collaboration with the Energy Commission, to develop optional time-variant electricity pricing tariffs for all customers that are not subject to mandatory time-variant pricing.

(8) Under existing law, a violation of the Public Utilities Act or an order or decision of the commission is a crime.

Certain provisions of this bill would be part of the act and an order or other action of the commission would be required to implement certain of the provisions. Because a violation of the bill's provisions or of an order or decision of the commission implementing those provisions would be a crime, this bill would impose a state-mandated local program by creating new crimes.

(9)

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the

state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: 2/3. Appropriation: yes. Fiscal committee: yes. State-mandated local program: yes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. This act shall be known, and may be cited as the Solar Energy Peak Procurement Act.

SEC. 2. Section 25402.10 is added to the Public Resources Code, to read:

25402.10. (a) As used in this section, the following terms have the following meanings:(1) "kW" means kilowatts or 1,000 watts, as measured from the alternating current side of the solar energy system inverter consistent with Section 223 of Title 15 of the United States Code.

(2) "Production home" means a single-family residence constructed as part of a development of at least 50 homes per project that is intended or offered for sale.

(3) "Solar energy system" means a photovoltaic solar collector or other photovoltaic solar energy device that has a primary purpose of providing for the collection, and distribution of solar energy for the generation of electricity, and that produces at least 1 kW alternating current rated peak electricity.

(b) A seller of production homes shall, beginning January 1, 2010, offer a solar energy system option to all customers that enter into negotiations to purchase a new production home constructed on land for which an application for a tentative subdivision map has been deemed complete on or after January 1, 2007, and shall disclose to customers the following information:

(1) The total installed cost of the solar energy system option.

(2) The estimated cost savings associated with the solar energy system option, as determined by the commission.

SEC. 3. Section 25744 of the Public Resources Code is amended to read:

25744. (a) Seventeen and one-half percent of the money collected pursuant to the renewable energy public goods charge shall be used for a multiyear, consumer-based program to foster the development of emerging renewable technologies in distributed generation applications.(b) Any funds used for emerging technologies pursuant to this section shall be expended ~~in accordance with the report,~~ subject to all of the following requirements:

(1) Funding for emerging technologies shall be provided through a competitive, market-based process that shall be in place for a period of not less than five years, and shall be structured so as to allow eligible emerging technology manufacturers and suppliers to anticipate and plan for increased sale and installation volumes over the life of the program.

(2) The program shall provide monetary rebates, buydowns, or equivalent incentives, subject to subparagraph (C), to purchasers, lessees, lessors, or sellers of eligible electricity generating systems. Incentives shall benefit the end-use consumer of renewable generation by directly and exclusively reducing the purchase or lease cost of the eligible system, or the cost of electricity produced by the eligible system. Incentives shall be issued on the basis of the

rated electrical generating capacity of the system measured in watts, or the amount of electricity production of the system, measured in kilowatthours. Incentives shall be limited to a maximum percentage of the system price, as determined by the commission.

(3) Eligible distributed emerging technologies are photovoltaic, solar thermal electric, fuel cell technologies that utilize renewable fuels, and wind turbines of not more than 50 kilowatts rated electrical generating capacity per customer site, and other distributed renewable emerging technologies that meet the emerging technology eligibility criteria established by the commission. Eligible electricity generating systems are intended primarily to offset part or all of the consumer's own electricity demand, and shall not be owned by local publicly owned electric utilities, nor be located at a customer site that is not receiving distribution service from an electrical corporation that is subject to the renewable energy public goods charge and contributing funds to support programs under this chapter. All eligible electricity generating system components shall be new and unused, shall not have been previously placed in service in any other location or for any other application, and shall have a warranty of not less than five years to protect against defects and undue degradation of electrical generation output. Systems and their fuel resources shall be located on the same premises of the end-use consumer where the consumer's own electricity demand is located, and all eligible electricity generating systems shall be connected to the utility grid in California. The commission may require eligible electricity generating systems to have meters in place to monitor and measure a system's performance and generation. Only systems that will be operated in compliance with applicable law and the rules of the Public Utilities Commission shall be eligible for funding.

(4) The commission shall limit the amount of funds available for any system or project of multiple systems and reduce the level of funding for any system or project of multiple systems that has received, or may be eligible to receive, any government or utility funds, incentives, or credit.

(5) In awarding funding, the commission may provide preference to systems that provide tangible demonstrable benefits to communities with a plurality of minority or low-income populations.

(6) In awarding funding, the commission shall develop and implement eligibility criteria and a system that provides preference to systems based upon system performance, taking into account factors, including, but not limited to, shading, insulation levels, and installation orientation.

(7) At least once annually, the commission shall publish and make available to the public the balance of funds available for emerging renewable energy resources for rebates, buydowns, and other incentives for the purchase of these resources.

(c) Notwithstanding Section 399.6 of the Public Utilities Code, the commission may expend, until December 31, 2008, up to sixty million dollars ($60,000,000) of the funding allocated to the Renewable Resources Trust Fund for the program established in this section, subject to the repayment requirements of subdivision (f) of Section 25751.

(d) The commission shall ensure proportional program support, not to exceed 10 percent of overall program funds, for the installation of solar energy systems on the new construction and rehabilitation of affordable housing units, including single and multifamily residential housing. In addition, the commission shall ensure that additional and proportional resources, not to exceed 5 percent of

overall program funds, are provided for the unique needs of subsidized low-income housing through targeted financing mechanisms and support, including a revolving loan fund, technical assistance, and other needs as identified in consultation with the California Tax Credit Allocation Committee.

(e) Nonresidential rebates awarded pursuant to subdivision (b) or funded through the Solar Energy Peak Procurement Program pursuant to Chapter 8 (commencing with Section 2830) of Part 2 of Division 1 of the Public Utilities Code, shall be paid directly to the contractor who will perform or subcontract the construction work pursuant to an agreement between the commission and the contractor.

SEC. 4. Division 16.7 (commencing with Section 26421) is added to the Public Resources Code, to read:

DIVISION 16.7. SOLAR ENERGY SYSTEM REBATES

26421. (a) "Affordable housing," as used in this division, means a housing project undertaken pursuant to Section 50052.5, 50053, or 50199.4 of the Health and Safety Code.(b) "Solar energy system," as used in this division, means a photovoltaic solar collector or other photovoltaic solar energy device that has a primary purpose of providing for the collection, storage, and distribution of solar energy for the generation of electricity. A solar energy system shall have a minimum manufacturer's warranty, as determined by the commission, and shall meet all applicable safety and performance standards established by the National Electrical Code, the institute of Electrical and Electronics Engineers, and accredited testing laboratories, including Underwriters laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability.

26422. (a) Not later than July 1, 2005, the commission shall award rebates to support the installation of grid-connected solar energy systems and shall adopt a schedule of declining rebates for this purpose, subject to all of the following:(1) The maximum rebate in year one shall be no greater than two dollars eighty cents ($2.80) per watt, and shall decline each year thereafter as determined by the commission.

(2) The rebate shall be zero as of January 1, 2015.

(b) The program shall be funded through the Solar Energy Peak Procurement Fund as provided in Section 2834 of the Public Utilities Code.

(c) The president of the Public Utilities Commission and the chairman of the State Energy Resources Conservation and Development Commission shall, no later than March of 2006, appear before the Senate Committee on Energy, Utilities and Communications and the Assembly Committee on Utilities and Commerce to issue a progress report on meeting the deadline for the creation of the Solar Energy Peak Procurement Program.

(d) The commission shall specify that this program is on a first-come first-serve basis for applicants.

26423. The commission shall ensure proportional program support, not to exceed 10 percent of overall program funds, for installation of solar energy systems on the new construction and rehabilitation of affordable housing units, including single and multifamily residential housing. In addition to the rebate, the commission shall also ensure that additional and proportional resources, not to exceed 5 percent of overall program funds, are provided for the unique needs of subsidized low-income housing through targeted financing mechanisms and support, including a revolving loan fund, technical

assistance, and other needs as identified in consultation with the California Tax Credit Allocation Committee.

SEC. 5. Section 385.1 is added to the Public Utilities Code, to read:

385.1. (a) Every local publicly owned electric utility, as defined in Section 9604, that has retail customers, shall establish a solar program consistent with the Solar Energy Peak Procurement Program established pursuant to Chapter 8 (commencing with Section 2830) of Part 2 and Division 16.7 (commencing with Section 26421) of the Public Resources Code, to fund program expenditure levels consistent with those established for the three largest electrical corporations in California, at a rate proportional to the size of the ratepayer base served by the local publicly owned electric utility. Every local publicly owned electric utility shall establish the program within a reasonable period of time, but not to exceed six months, after the commission adopts and implements any solar homes program pursuant to Chapter 8 (commencing with Section 2830).(b) Each local publicly owned electric utility shall report, on an annual basis, to its customers and to the State Energy Resources Conservation and Development Commission, information relative to the utility's solar program. The State Energy Resources Conservation and Development Commission may establish guidelines for the information to be included in the annual report.

(c) The charge imposed pursuant to this section shall fund the local publicly owned electric utility's administrative and reporting costs pursuant to this section.

SEC. 6. Section 399.6 of the Public Utilities Code is amended to read:

399.6. (a) In order to optimize public investment and ensure that the most cost-effective and efficient investments in renewable resources are vigorously pursued, the Energy Commission shall create an investment plan as set forth in paragraphs (1) to (3), inclusive, to govern the allocation of funds provided pursuant to this article. The Energy Commission's long-term goal shall be a fully competitive and self-sustaining California renewable energy supply. The investment plan shall be in accordance with all of the following:(1) The investment plan's objective shall be to increase, in the near term, the quantity of California's electricity generated by in-state renewable energy resources, while protecting system reliability, fostering resource diversity, and obtaining the greatest environmental benefits for California residents.

(2) An additional objective of the plan shall be to identify and support emerging renewable energy technologies that have the greatest near-term commercial promise and that merit targeted assistance.

(3) The investment plan shall contain specific numerical targets, reflecting the projected impact of the plan, for both of the following:

(A) Increased quantity of California electrical generation produced from emerging technologies and from overall renewable resources.

(B) Increased supply of renewable generation available from facilities other than those selling to investor-owned utilities under contracts entered into prior to 1996 under the federal Public Utilities Regulatory Policies Act of 1978 (P.L. 95-617).

(b) The Energy Commission shall, on an annual basis, evaluate progress on meeting the targets set forth in subparagraphs (A) and (B) of paragraph (3) of subdivision (a), or any substitute provisions adopted by the Legislature upon review of the investment plan, and assess the impact of the investment plan on reducing the cost to

Californians of renewable energy generation.

(c) In preparing these investment plans, the Energy Commission shall recommend allocations among all of the following:

(1) (A) Except as provided in subparagraph (B), production incentives for new renewable energy, including repowered or refurbished renewable energy.

(B) Allocations may not be made for renewable energy that is generated by a project that remains under a power purchase contract with an electrical corporation originally entered into prior to September 24, 1996, whether amended or restated thereafter.

(C) Notwithstanding subparagraph (B), production incentives for incremental new, repowered, or refurbished renewable energy from existing projects under ~~a power~~ *an electricity* purchase contract with an electrical corporation originally entered into prior to September 24, 1996, whether amended or restated thereafter, may be allowed in any month, if all of the following occur:

(i) The project's ~~power~~ *electricity* purchase contract provides that all ~~energy~~ *electricity* delivered and sold under the contract is paid at a price that does not exceed commission-approved short-run avoided cost of ~~energy~~ *electricity* .

(ii) Either of the following:

(I) The ~~power~~ *electricity* purchase contract is amended to provide that the kilowatthours used to determine the capacity payment in any time-of-delivery period in any month under the contract shall be equal to the actual kilowatthour production, but no greater than the five-year average of the kilowatthours delivered for the corresponding time-of-delivery period and month, in the years 1994 to 1998, inclusive.

(II) If a project's installed capacity as of December 31, 1998, is less than 75 percent of the nameplate capacity as stated in the ~~power~~ *electricity* purchase contract, the ~~power~~ *electricity* purchase contract is amended to provide that the kilowatthours used to determine the capacity payment in any time-of-delivery period in any month under the contract shall be equal to the actual kilowatthour production, but no greater than the product of the five-year average of the kilowatthours delivered for the corresponding time-of-delivery period and month, in the years 1994 to 1998, inclusive, and the ratio of installed capacity as of December 31 of the previous year, but not to exceed contract nameplate capacity, to the installed capacity as of December 31, 1998.

(iii) The production incentive is payable only with respect to the kilowatthours delivered in a particular month that exceeds the corresponding five-year average calculated pursuant to clause (ii).

(2) Rebates, buydowns, or equivalent incentives for emerging renewable technologies.

(3) Customer credits for renewables not under contract with a utility.

(4) Customer education.

(5) Incentives for reducing fuel costs that are confirmed to the satisfaction of the Energy Commission at solid fuel biomass energy facilities in order to provide demonstrable environmental and public benefits, including, but not limited to, air quality.

(6) Solar thermal generating resources that enhance the environmental value or reliability of the electrical system and that require financial assistance to remain economically viable, as determined by the Energy Commission. The Energy Commission may

require financial disclosure from applicants for purposes of this paragraph.

(7) Specified fuel cell technologies, if the Energy Commission makes all of the following findings:

(A) The specified technologies have similar or better air pollutant characteristics than renewable technologies in the investment plan.

(B) The specified technologies require financial assistance to become commercially viable by reference to wholesale generation prices.

(C) The specified technologies could contribute significantly to the infrastructure development or other innovation required to meet the long-term objective of a self-sustaining, competitive supply of renewable energy.

(8) Existing wind-generating resources, if the Energy Commission finds that the existing wind-generating resources are a cost-effective source of reliable and environmental benefits compared with other eligible sources, and that the existing wind-generating resources require financial assistance to remain economically viable, as determined by the Energy Commission. The Energy Commission may require financial disclosure from applicants for the purposes of this paragraph.

(d) The commission shall establish a cap on the aggregate amount of funds that may be awarded to public entities from the program that provides customer credits for renewables. The intent of the cap is to assure adequate funding of credits for residential and small commercial customers.

(e) ~~Notwithstanding any other provision of law, moneys collected for renewable energy pursuant to this article shall be transferred to the Renewable Resource Trust Fund of the Energy Commission, to be held until further action by the Legislature.~~ The Energy Commission shall prepare and submit to the Legislature, on or before March 31, 2001, an initial investment plan for these moneys, addressing the application of moneys collected between January 1, 2002, and January 1, 2007. The initial investment plan shall also include an evaluation of and report to the Legislature regarding the appropriateness and structure of a mandatory state purchase of renewable energy. On or before March 31, 2006, the Energy Commission shall prepare an investment plan proposing the application of moneys collected between January 1, 2007, and January 1, 2012. ~~No~~ *Except for those moneys expended through the Emerging Renewable Resources Account, no* moneys may be expended in the years covered by these plans without further legislative action.

(f) Notwithstanding subdivision (e), the commission may advance moneys to the Emerging Renewable Resources Account and expend those moneys without further legislative action, subject to subdivision (f) of Section 25751 of the Public Resources Code.

SEC. 7. Section 399.8 of the Public Utilities Code is amended to read:

399.8. (a) In order to ensure that the citizens of this state continue to receive safe, reliable, affordable, and environmentally sustainable electric service, it is the policy of this state and the intent of the Legislature that prudent investments in energy efficiency, renewable energy, and research, development and demonstration shall continue to be made.(b) (1) Every customer of an electrical corporation, shall pay a nonbypassable system benefits charge authorized pursuant to this article. The system benefits charge shall fund energy efficiency, renewable energy, and research,

development and demonstration.

(2) Local publicly owned electric utilities shall continue to collect and administer system benefits charges pursuant to Section 385.

(c) (1) The commission shall require each electrical corporation to identify a separate rate component to collect revenues to fund energy efficiency, renewable energy, and research, development and demonstration programs authorized pursuant to this section beginning January 1, 2002, through January 1, 2012. The rate component shall be a nonbypassable element of the local distribution service and collected on the basis of usage.

(2) This rate component may not exceed, for any tariff schedule, the level of the rate component that was used to recover funds authorized pursuant to Section 381 on January 1, 2000. If the amounts specified in paragraph (1) of subdivision (d) are not recovered fully in any year, the commission shall reset the rate component to restore the unrecovered balance, provided that the rate component may not exceed, for any tariff schedule, the level of the rate component that was used to recover funds authorized pursuant to Section 381 on January 1, 2000. Pending restoration, any annual shortfalls shall be allocated pro rata among the three funding categories in the proportions established in paragraph (1) of subdivision (d).

(d) The commission shall order San Diego Gas and Electric Company, Southern California Edison Company, and Pacific Gas and Electric Company to collect these funds commencing on January 1, 2002, as follows:

(1) Two hundred twenty-eight million dollars ($228,000,000) per year in total for energy efficiency and conservation activities, one hundred thirty-five million dollars ($135,000,000) in total per year for renewable energy, and sixty-two million five hundred thousand dollars ($62,500,000) in total per year for research, development and demonstration. The funds for energy efficiency and conservation activities shall continue to be allocated in proportions established for the year 2000 as set forth in paragraph (1) of subdivision (c) of Section 381.

(2) The amounts shall be adjusted annually at a rate equal to the lesser of the annual growth in electric commodity sales or inflation, as defined by the gross domestic product deflator. *The amounts collected to fund energy efficiency, renewable energy, and research, development and demonstration, from January 1, 2005, to December 31, 2006, shall be those levels established by the commission for 2004. Any additional moneys collected as a result of the difference between the rate component amount specified in paragraph (2) of subdivision (c) and the amounts required to be collected pursuant to this subdivision, from January 1, 2005, to December 31, 2006, shall be transferred at least quarterly to the Solar Energy Peak Procurement Fund established pursuant to Section 2833.*

(e) The commission and the Energy Commission shall retain and continue their oversight responsibilities as set forth in Sections 381 and 383, and Chapter 7.1 (commencing with Section 25620) and Chapter 8.6 (commencing with Section 25740) of Division 15 of the Public Resources Code.

(f) (1) On or before January 1, 2004, the Governor shall appoint an independent review panel including, but not limited to, members with expertise on the energy service needs of large and small electricity consumers, system reliability issues, and energy-related public policy. On or before January 1, 2005, the panel shall prepare and submit to the Legislature and the Energy Commission a report evaluating the energy efficiency, renewable energy, and research,

development and demonstration programs funded under this section. Reasonable costs associated with the review in each of the three program categories, including technical assistance, may be charged to the relevant program category under procedures to be developed by the commission for energy efficiency and by the Energy Commission for renewable energy and research development and demonstration.

(2) The report shall also assess all of the following:

(A) Whether ongoing programs are consistent with the statutory goals.

(B) Whether potential synergies among the program categories described in paragraph (1) that could provide enhanced public value have been identified and incorporated in the programs.

(C) If established targets for increased renewable generation are likely to be achieved.

(D) What changes should be made to result in a more efficient use of public resources.

(3) The report shall also compare the Energy Commission's programs with efforts undertaken by other states and assess, as an alternative, the relative costs and benefits of adopting a tradable minimum renewable energy requirement in California. The evaluation shall include recommendations intended to optimize renewable resource development at the least cost.

(4) For energy efficiency programs, the report shall include an evaluation of all of the following:

(A) The net benefits secured for residential customers, taking into account both public and private costs, including improvements in that customer group's ability to avoid or reduce consumption of relatively costly peak electricity.

(B) Whether the programs provide a balance of benefits to all sectors that contribute to the funding.

(C) The extent to which competition in energy markets including, but not limited to, load participation in ancillary services markets, and improvements in technology affect the continuing need for such programs.

(D) The status and growth of the private, competitive energy services industry that provides energy efficiency services and other energy products to customers.

(E) The commercial availability of any new technologies that reduce electricity demands during high-priced periods.

(F) Customers' willingness and ability to reduce consumption or adopt energy efficiency measures without program support.

(G) The extent to which the programs have delivered cost-effective energy efficiency not adequately provided by markets and as a result have reduced energy demand and consumption.

(H) The relative cost-effectiveness of program expenditures compared to other current or potential expenditures to enhance system reliability.

(5) The report shall include specific recommendations aimed at assisting the Legislature in determining whether to change or eliminate the collection of the system benefits charge on or after January 1, 2007.

(6) The panel may update and revise the report as needed.

(g) Promptly after receiving the panel's report, the commission shall convene a proceeding to address implementation of the panel's energy efficiency recommendations.

(h) An applicant for the Large Nonresidential Standard Performance Contract Program funded pursuant to paragraph (1) of subdivision (b) and an electrical corporation shall promptly attempt to resolve

disputes that arise related to the program's guidelines and parameters prior to entering into a program agreement. The applicant shall provide the electrical corporation with written notice of any dispute. Within 10 business days after receipt of the notice, the parties shall meet to resolve the dispute. If the dispute is not resolved within 10 business days after the date of the meeting, the electrical corporation shall notify the applicant of his or her right to file a complaint with the commission, which complaint shall describe the grounds for the complaint, injury, and relief sought. The commission shall issue its findings in response to a filed complaint within 30 business days of the date of receipt of the complaint. Prior to issuance of its findings, the commission shall provide a copy of the complaint to the electrical corporation, which shall provide a response to the complaint to the commission within five business days of the date of receipt. During the dispute period, the amount of estimated financial incentives shall be held in reserve until the dispute is resolved.

SEC. 8. Section 760 is added to the Public Utilities Code, to read:

760. The commission, in collaboration with the State Energy Resources Conservation and Development Commission, shall develop optional time-variant electricity pricing tariffs for all customers that are not subject to mandatory time-variant pricing as of January 1, 2004, including net metered customers.

SEC. 9. Section 2827 of the Public Utilities Code is amended to read:

2827. (a) The Legislature finds and declares that a program to provide net energy metering for eligible customer-generators is one way to encourage substantial private investment in renewable energy resources, stimulate in-state economic growth, reduce demand for electricity during peak consumption periods, help stabilize California's energy supply infrastructure, enhance the continued diversification of California's energy resource mix, and reduce interconnection and administrative costs for electricity suppliers.

(b) As used in this section, the following definitions apply:

(1) "Electric service provider" means an electrical corporation, as defined in Section 218, a local publicly owned electric utility, as defined in Section 9604, or an electrical cooperative, as defined in Section 2776, or any other entity that offers electrical service. This section shall not apply to a local publicly owned electric utility, as defined in Section 9604 of the Public Utilities Code, that serves more than 750,000 customers and that also conveys water to its customers.

(2) "Eligible customer-generator" means a residential, small commercial customer as defined in subdivision (h) of Section 331, commercial, industrial, or agricultural customer of an electric service provider, who uses a solar or a wind turbine electrical generating facility, or a hybrid system of both, with a capacity of not more than one megawatt that is located on the customer's owned, leased, or rented premises, is interconnected and operates in parallel with the electric grid, and is intended primarily to offset part or all of the customer's own electrical requirements.

(3) "Net energy metering" means measuring the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period as described in subdivision (h). Net energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. An additional meter or meters to monitor the flow of

electricity in each direction may be installed with the consent of the customer-generator, at the expense of the electric service provider, and the additional metering shall be used only to provide the information necessary to accurately bill or credit the customer-generator pursuant to subdivision (h), or to collect solar or wind electric generating system performance information for research purposes. If the existing electrical meter of an eligible customer-generator is not capable of measuring the flow of electricity in two directions, the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is able to measure electricity flow in two directions. If an additional meter or meters are installed, the net energy metering calculation shall yield a result identical to that of a single meter. An eligible customer-generator who already owns an existing solar or wind turbine electrical generating facility, or a hybrid system of both, is eligible to receive net energy metering service in accordance with this section.

(4) "Wind energy co-metering" means any wind energy project greater than 50 kilowatts, but not exceeding one megawatt, where the difference between the electricity supplied through the electric grid and the electricity generated by an eligible customer-generator and fed back to the electric grid over a 12-month period is as described in subdivision (h). Wind energy co-metering shall be accomplished pursuant to Section 2827.8.

(5) "Co-energy metering" means a program that is the same in all other respects as a net energy metering program, except that the local publicly owned electric utility, as defined in Section 9604, has elected to apply a generation-to-generation energy and time-of-use credit formula as provided in subdivision (i).

(6) "Ratemaking authority" means, for an electrical corporation as defined in Section 218, or an electrical cooperative as defined in Section 2776, the commission, and for a local publicly owned electric utility as defined in Section 9604, the local elected body responsible for regulating the rates of the local publicly owned utility.

(c) (1) Every electric service provider shall develop a standard contract or tariff providing for net energy metering, and shall make this contract available to eligible customer-generators, upon request, on a first-come-first-served basis until the time that the total rated generating capacity used by eligible customer-generators exceeds ~~one-half of 1~~ *1.5* percent of the electric service provider's aggregate customer peak demand.

(2) On an annual basis, beginning in 2003, every electric service provider shall make available to the ratemaking authority information on the total rated generating capacity used by eligible customer-generators that are customers of that provider in the provider's service area. For those electric service providers who are operating pursuant to Section 394, they shall make available to the ratemaking authority the information required by this paragraph for each eligible customer-generator that is their customer for each service area of an electric corporation, local publicly owned electric utility, or electrical cooperative, in which the customer has net energy metering. The ratemaking authority shall develop a process for making the information required by this paragraph available to energy service providers, and for using that information to determine when, pursuant to paragraph (3), a service provider is not obligated to provide net energy metering to additional customer-generators in its service area.

(3) Notwithstanding paragraph (1), an electric service provider is

not obligated to provide net energy metering to additional customer-generators in its service area when the combined total peak demand of all customer-generators served by all the electric service providers in that service area furnishing net energy metering to eligible customer-generators exceeds ~~one-half of 1~~ *1.5* percent of the aggregate customer peak demand of those electric service providers.

(d) Electric service providers shall make all necessary forms and contracts for net metering service available for download from the Internet.

(e) (1) Every electric service provider shall ensure that requests for establishment of net energy metering are processed in a time period not exceeding that for similarly situated customers requesting new electric service, but not to exceed 30 working days from the date the electric service provider receives a completed application form for net metering service, including a signed interconnection agreement from an eligible customer-generator and the electric inspection clearance from the governmental authority having jurisdiction. If an electric service provider is unable to process the request within the allowable timeframe, the electric service provider shall notify both the customer-generator and the ratemaking authority of the reason for its inability to process the request and the expected completion date.

(2) Electric service providers shall ensure that requests for an interconnection agreement from an eligible customer-generator are processed in a time period not to exceed 30 working days from the date the electric service provider receives a completed application form from the eligible customer-generator for an interconnection agreement. If an electric service provider is unable to process the request within the allowable timeframe, the electric service provider shall notify the customer-generator and the ratemaking authority of the reason for its inability to process the request and the expected completion date.

(f) (1) If a customer participates in direct transactions pursuant to paragraph (1) of subdivision (b) of Section 365 with an electric supplier that does not provide distribution service for the direct transactions, the service provider that provides distribution service for an eligible customer-generator is not obligated to provide net energy metering to the customer.

(2) If a customer participates in direct transactions pursuant to paragraph (1) of subdivision (b) of Section 365 with an electric supplier, and the customer is an eligible customer-generator, the service provider that provides distribution service for the direct transactions may recover from the customer's electric service provider the incremental costs of metering and billing service related to net energy metering in an amount set by the ratemaking authority.

(g) Each net energy metering contract or tariff shall be identical, with respect to rate structure, all retail rate components, and any monthly charges, to the contract or tariff to which the same customer would be assigned if the customer did not use an eligible solar or wind electrical generating facility, except that eligible customer-generators shall not be assessed standby charges on the electrical generating capacity or the kilowatthour production of an eligible solar or wind electrical generating facility. The charges for all retail rate components for eligible customer-generators shall be based exclusively on the customer-generator's net kilowatthour consumption over a 12-month period, without regard to the customer-generator's choice of electric

service provider. Any new or additional demand charge, standby charge, customer charge, minimum monthly charge, interconnection charge, or any other charge that would increase an eligible customer-generator's costs beyond those of other customers who are not customer-generators in the rate class to which the eligible customer-generator would otherwise be assigned if the customer did not own, lease, rent, or otherwise operate an eligible solar or wind electrical generating facility are contrary to the intent of this section, and shall not form a part of net energy metering contracts or tariffs.

(h) For eligible residential and small commercial customer-generators, the net energy metering calculation shall be made by measuring the difference between the electricity supplied to the eligible customer-generator and the electricity generated by the eligible customer-generator and fed back to the electric grid over a 12-month period. The following rules shall apply to the annualized net metering calculation:

(1) The eligible residential or small commercial customer-generator shall, at the end of each 12-month period following the date of final interconnection of the eligible customer-generator's system with an electric service provider, and at each anniversary date thereafter, be billed for electricity used during that period. The electric service provider shall determine if the eligible residential or small commercial customer-generator was a net consumer or a net producer of electricity during that period.

(2) At the end of each 12-month period, where the electricity supplied during the period by the electric service provider exceeds the electricity generated by the eligible residential or small commercial customer-generator during that same period, the eligible residential or small commercial customer-generator is a net electricity consumer and the electric service provider shall be owed compensation for the eligible customer-generator's net kilowatthour consumption over that same period. The compensation owed for the eligible residential or small commercial customer-generator's consumption shall be calculated as follows:

(A) For all eligible customer-generators taking service under tariffs employing "baseline" and "over baseline" rates, any net monthly consumption of electricity shall be calculated according to the terms of the contract or tariff to which the same customer would be assigned to or be eligible for if the customer was not an eligible customer-generator. If those same customer-generators are net generators over a billing period, the net kilowatthours generated shall be valued at the same price per kilowatthour as the electric service provider would charge for the baseline quantity of electricity during that billing period, and if the number of kilowatthours generated exceeds the baseline quantity, the excess shall be valued at the same price per kilowatthour as the electric service provider would charge for electricity over the baseline quantity during that billing period.

(B) For all eligible customer-generators taking service under tariffs employing "time of use" rates, any net monthly consumption of electricity shall be calculated according to the terms of the contract or tariff to which the same customer would be assigned to or be eligible for if the customer was not an eligible customer-generator. When those same customer-generators are net generators during any discrete time of use period, the net kilowatthours produced shall be valued at the same price per kilowatthour as the electric service provider would charge for retail kilowatthour sales during that same time of use period. If the

eligible customer-generator's time of use electrical meter is unable to measure the flow of electricity in two directions, paragraph (3) of subdivision (b) shall apply.

(C) For all residential and small commercial customer-generators and for each billing period, the net balance of moneys owed to the electric service provider for net consumption of electricity or credits owed to the customer-generator for net generation of electricity shall be carried forward as a monetary value until the end of each 12-month period. For all commercial, industrial, and agricultural customer-generators the net balance of moneys owed shall be paid in accordance with the electric service provider's normal billing cycle, except that if the commercial, industrial, or agricultural customer-generator is a net electricity producer over a normal billing cycle, any excess kilowatthours generated during the billing cycle shall be carried over to the following billing period as a monetary value, calculated according to the procedures set forth in this section, and appear as a credit on the customer-generator's account, until the end of the annual period when paragraph (3) shall apply.

(3) At the end of each 12-month period, where the electricity generated by the eligible customer-generator during the 12-month period exceeds the electricity supplied by the electric service provider during that same period, the eligible customer-generator is a net electricity producer and the electric service provider shall retain any excess kilowatthours generated during the prior 12-month period. The eligible customer-generator shall not be owed any compensation for those excess kilowatthours unless the electric service provider enters into a purchase agreement with the eligible customer-generator for those excess kilowatthours.

(4) The electric service provider shall provide every eligible residential or small commercial customer-generator with net electricity consumption information with each regular bill. That information shall include the current monetary balance owed the electric service provider for net electricity consumed since the last 12-month period ended. Notwithstanding this subdivision, an electric service provider shall permit that customer to pay monthly for net energy consumed.

(5) If an eligible residential or small commercial customer-generator terminates the customer relationship with the electric service provider, the electric service provider shall reconcile the eligible customer-generator's consumption and production of electricity during any part of a 12-month period following the last reconciliation, according to the requirements set forth in this subdivision, except that those requirements shall apply only to the months since the most recent 12-month bill.

(6) If an electric service provider providing net metering to a residential or small commercial customer-generator ceases providing that electrical service to that customer during any 12-month period, and the customer-generator enters into a new net metering contract or tariff with a new electric service provider, the 12-month period, with respect to that new electric service provider, shall commence on the date on which the new electric service provider first supplies electric service to the customer-generator.

(i) Notwithstanding any other provisions of this section, the following provisions shall apply to an eligible customer-generator with a capacity of more than 10 kilowatts, but not exceeding one megawatt, that receives electrical service from a local publicly owned electric utility, as defined in Section 9604, that has elected to utilize a co-energy metering program unless the electric service

provider chooses to provide service for eligible customer-generators with a capacity of more than 10 kilowatts in accordance with subdivisions (g) and (h):

(1) The eligible customer-generator shall be required to utilize a meter, or multiple meters, capable of separately measuring electricity flow in both directions. All meters shall provide "time-of-use" measurements of electricity flow, and the customer shall take service on a time-of-use rate schedule. If the existing meter of the eligible customer-generator is not a time-of-use meter or is not capable of measuring total flow of energy in both directions, the eligible customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is both time-of-use and able to measure total electricity flow in both directions. This subdivision shall not restrict the ability of an eligible customer-generator to utilize any economic incentives provided by a government agency or the electric service provider to reduce its costs for purchasing and installing a time-of-use meter.

(2) The consumption of electricity from the electric service provider shall result in a cost to the eligible customer-generator to be priced in accordance with the standard rate charged to the eligible customer-generator in accordance with the rate structure to which the customer would be assigned if the customer did not use an eligible solar or wind electrical generating facility. The generation of electricity provided to the electric service provider shall result in a credit to the eligible customer-generator and shall be priced in accordance with the generation component, established under the applicable structure to which the customer would be assigned if the customer did not use an eligible solar or wind electrical generating facility.

(3) All costs and credits shall be shown on the eligible customer-generator's bill for each billing period. In any months in which the eligible customer-generator has been a net consumer of electricity calculated on the basis of value determined pursuant to paragraph (2), the customer-generator shall owe to the electric service provider the balance of electricity costs and credits during that billing period. In any billing period in which the eligible customer-generator has been a net producer of electricity calculated on the basis of value determined pursuant to paragraph (2), the electric service provider shall owe to the eligible customer-generator the balance of electricity costs and credits during that billing period. Any net credit to the eligible customer-generator of electricity costs may be carried forward to subsequent billing periods, provided that an electric service provider may choose to carry the credit over as a kilowatt hour credit consistent with the provisions of any applicable tariff, including any differences attributable to the time of generation of the electricity. At the end of each 12-month period, the electric service provider may reduce any net credit due to the eligible customer-generator to zero.

(j) A solar or wind turbine electrical generating system, or a hybrid system of both, used by an eligible customer-generator shall meet all applicable safety and performance standards established by the National Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability. A customer-generator whose solar or wind turbine electrical generating system, or a hybrid system of both, meets those standards and rules shall not be required to install additional controls, perform or pay

for additional tests, or purchase additional liability insurance.

(k) If the commission determines that there are cost or revenue obligations for an electric corporation, as defined in Section 218, that may not be recovered from customer-generators acting pursuant to this section, those obligations shall remain within the customer class from which any shortfall occurred and may not be shifted to any other customer class. Net-metering and co-metering customers shall not be exempt from the public benefits charge. In its report to the Legislature, the commission shall examine different methods to ensure that the public benefits charge remains a nonbypassable charge.

(l) A net metering customer shall reimburse the Department of Water Resources for all charges that would otherwise be imposed on the customer by the commission to recover bond-related costs pursuant to an agreement between the commission and the Department of Water Resources pursuant to Section 80110 of the Water Code, as well as the costs of the department equal to the share of the department's estimated net unavoidable power purchase contract costs attributable to the customer. The commission shall incorporate the determination into an existing proceeding before the commission, and shall ensure that the charges are nonbypassable. Until the commission has made a determination regarding the nonbypassable charges, net metering shall continue under the same rules, procedures, terms, and conditions as were applicable on December 31, 2002.

(m) In implementing the requirements of subdivisions (k) and (l), a customer-generator shall not be required to replace its existing meter except as set forth in paragraph (3) of subdivision (b), nor shall the electric service provider require additional measurement of usage beyond that which is necessary for customers in the same rate class as the eligible customer-generator.

(n) On or before January 1, 2005, the commission shall submit a report to the Governor and the Legislature that assesses the economic and environmental costs and benefits of net metering to customer-generators, ratepayers, and utilities, including any beneficial and adverse effects on public benefit programs and special purpose surcharges. The report shall be prepared by an independent party under contract with the commission.

(o) It is the intent of the Legislature that the Treasurer incorporate net energy metering and co-energy metering projects undertaken pursuant to this section as sustainable building methods or distributive energy technologies for purposes of evaluating low-income housing projects.

SEC. 10. Chapter 8 (commencing with Section 2830) is added to Part 2 of Division 1 of the Public Utilities Code , to read:

CHAPTER 8. SOLAR ENERGY PEAK PROCUREMENT PROGRAM

2830. (a) The Legislature finds and declares all of the following:(1) Electricity generated by solar energy using photovoltaic systems provides a reliable supply of electricity during peak demand periods.

(2) Electricity generated by photovoltaic systems is a reliable substitute for the purchase of expensive, conventionally-generated electricity during peak demand periods.

(3) Electricity generated by photovoltaic systems is a substitute for demand management activities which lower peak demand.

(4) Electricity generated by photovoltaic systems is a substitute for interruptible energy programs which lower peak demand.

(5) The commission requires utilities to procure peak demand period electricity supplies and allocates those costs to all customers.

(6) The commission has established demand management programs and interruptible energy programs and allocates the costs of those programs to all customers.

(7) It is the intent of the Legislature that this program remain in effect for 10 years and that the subsidy level per kilowatt of capacity be reduced to zero at the end of those 10 years.

(b) It is the intent of the Legislature that this program be funded at a level of up to one hundred million dollars ($100,000,000) annually and that this program not result in fee or rate increases. The commission shall not increase for any reason the amount designated for this program, regardless of any increase in applications or lack of funding.

(c) It is the intent of the Legislature that the customers of each utility benefit in proportion to the amount paid for the program by those customers. Any program adopted by the commission shall be a cost-effective investment by ratepayers in peak electricity generation capacity that enables ratepayers to recoup the cost of their investment through lower rates as a result of avoiding purchases of electricity at peak rates generated by traditional powerplants and peaker generation units, with additional system reliability and pollution reduction benefits.

(d) It is the intent of the Legislature that existing photovoltaic programs be harmonized with the program established by this legislation.

2831. The commission shall by January 1, 2006, open a proceeding to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible and demand reduction programs, as follows:(a) The proceeding shall review the self-generation incentive program administered by the commission to harmonize it with the solar energy programs administered by the State Energy Resources Conservation and Development Commission and shall issue a report on its recommendations to the Legislature.

(b) The proceeding shall include the conducting of a cost versus benefit analysis to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible and demand reduction programs that are in the best interests of ratepayers.

(c) The proceeding shall review the cost and benefits of net metering and report to the Legislature on whether the net metering cap should be changed.

2832. The commission shall consider how customer-owned photovoltaic distributed generation pursuant to this program can be integrated with future procurement plans, resource adequacy requirements, and energy efficiency measures.

2833. The Solar Energy Peak Procurement Fund is hereby created in the State Treasury. Moneys in the fund may be expended, upon appropriation by the Legislature, for the state's administration of the program, to be used to encourage the deployment of grid-connected solar photovoltaic systems in the service territory of investor-owned utilities by subsidizing the installed cost of those systems for all customer classes.

2834. The commission shall direct utilities to regularly deposit a portion of the moneys derived from electric rates into the Solar Peak Energy Procurement Fund. The commission shall determine the amount of electric rates to be deposited. That amount shall come from unused funds previously authorized for demand management and interruptible programs and rates which previously paid for demand management and interruptible programs which the commission determines

to be less cost effective than the photovoltaic incentive program established by Division 16.7 (commencing with Section 26420) of the Public Resources Code.

2835. On or before December 31, 2005, the commission shall report to the Legislature on whether the commission was able to obtain funding from existing programs sufficient to achieve the purposes of the act enacting this chapter, and shall submit recommendations for additional funding sources, if necessary.

SEC. 11.

No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because certain costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

With regard to any other mandates, no reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.